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(71) Applicant (for all designated States except US): ELAN  
PHARMACEUTICALS, INC. [US/US]; 800 Gateway  
Boulevard, South San Francisco, California 94080 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CHILCOTE,  
Tamle, J. [US/US]; 187 Magellan Avenue, San Francisco,  
California 94116 (US). GOLDSTEIN, Jason [US/US];  
1420 El Camino Real #1, Burlingame, California 94010  
(US). ANDERSON, John, P. [US/US]; 1323-A Lyon  
Street, San Francisco, California 94115 (US). WALKER,  
Donald [US/US]; 33 Mozdén Lane, Pleasant Hill, CA  
94523 (US).

(74) Agents: LIEBESCHUETZ, Joe et al.; TOWNSEND  
AND TOWNSEND AND CREW LLP, Two Embarcadero  
Center, 8th Floor, San Francisco, California 94111-3834  
(US).

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ning of each regular issue of the PCT Gazette.

(54) Title: TRUNCATED FRAGMENTS OF ALPHA-SYNUCLEIN IN LEWY BODY DISEASE

(57) Abstract: The application identifies novel fragments of alpha-synuclein in patients with Lewy Body Disease (LBD) and trans-  
genic animal models thereof. These diseases are characterized by aggregations of alpha-synuclein. The fragments have a truncated  
C-terminus relative to full-length alpha-synuclein. Some fragments are characterized by a molecular weight of about 12 kDa as  
determined by SDS gel electrophoresis in tricine buffer and a truncation of at least ten contiguous amino acids from the C-terminus  
of natural alpha-synuclein. The site of cleavage preferably occurs after residue 117 and before residue 126 of natural alpha-synu-  
clein. The identification of these novel fragments of alpha-synuclein has a number of application in for example, drug discovery,  
diagnostics, therapeutics, and transgenic animals.

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International application No.

PCT/US05/37875

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
IPC: A61K 49/00( 2006.01);A01N 61/00( 2006.01);37/18( 2006.01);A61K 31/00( 2006.01);38/00( 2006.01);G01N 33/00( 2006.01);A01K 67/00( 2006.01);67/033( 2006.01)		
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<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 424/9.1; 514/1,2; 800/3,9,12		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	TSIM, K.W. et al., Monoclonal antibodies specific for the different subunits of asymmetric acetylcholinesterase from chick muscle. J. Neurochem. July 1988, Vol. 51, No. 1, pages 95-104, see abstract	52
X	HAMBURGER, A.W., et al., Isolation and characterization of monoclonal antibodies reactive with endothelial cells. Tissue Cell. 1985, Vol. 17, No. 4, pages 451-459, abstract	52
X	US 6,780,971 B2 (Wolozin et al) 24 August 2004 (24.08.2004), column 17, lines 53-62	1, 4
A	TAKAHASHI, M. Phosphorylation of alpha-synuclein characteristic of synucleinopathy lesions is recapitulated in alpha-synuclein transgenic Drosophila. Neuroscience Letters. 2003, Vol. 336, pages 155-158.	1-52
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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"A"	document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Authorized officer Ram Shukla, Ph.D. Telephone No. (571) 272-1600

**INTERNATIONAL SEARCH REPORT**International application No.  
PCT/US05/37875**C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	OKOCHI, M. Constitutive Phosphorylation of the Parkinson's Disease Associated alpha-Synuclein. The Journal of Biological Chemistry. January 2000, Vol 275. No. 1, pages 390-397.	1-52
A	KIM, T.D. et al. Structural Changes in alpha-Synuclein Affect its Chaperone-like Activity In Vitro. Protein Science. 2000, Vol 9. pages 2489-2496	1-52
A	HOYER, W. et al., Dependence of alpha-Synuclein Aggregate Morphology on Solution Conditions. J. Mol. Biol. 2002, Vol 322, pages 383-393.	1-52

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Continuation of B. FIELDS SEARCHED Item 3:  
Google, EAST, STN  
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